

Warm-Up

1. Factor  
 $3x^2 - 16x - 12 = 0$   
 $\{6, -3\}$   
 $3x^2 - 18x + 2x - 12 = 0$   
 $3x(x-6) + 2(x-6) = 0$   
 $(3x+2)(x-6) = 0$

2.   
 2.  $m\widehat{EC} = 140^\circ$   
 3.  $m\widehat{DA} = 90^\circ$   
 4.  $m\widehat{ACE} = 320^\circ$   
 5.  $m\widehat{ED} = 130^\circ$

6. If  $r = 9\text{ cm}$   
 length  $\widehat{AE} = 2\pi r$   
 $\frac{90}{360} \cdot 18\pi$

7.   
 AC = 10  
 DE = 12  
 AB = 8

Quiz tomorrow 10.1-10.3

Vocabulary

chord  $\overline{KI}$

diameter  $\overline{JD}$

radius  $\overline{AE}$

secant  $\overleftrightarrow{AK}$

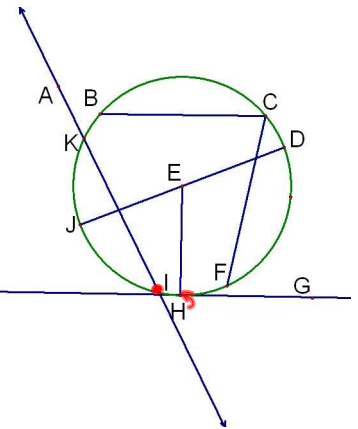
tangent  $\overleftrightarrow{AG}$

minor arc  $\widehat{JK}$

major arc  $\widehat{JKF}$

semicircle  $\widehat{JID}$

central angle  $\angle JEH$



$m\angle JEH = 60^\circ$   
 $r = 8\text{ cm}$   
 $m\widehat{JH} = ?$   
 $m\widehat{DH} = ?$   
 $\widehat{JH} = ?$   
 $\frac{60}{360} \cdot 16\pi$   
 $\frac{1}{6} 16\pi = \frac{8\pi}{3}\text{ cm}$

Be able to determine

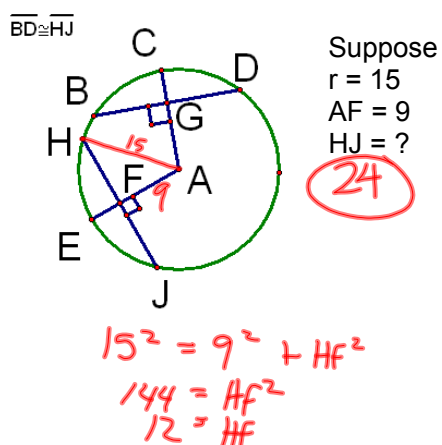
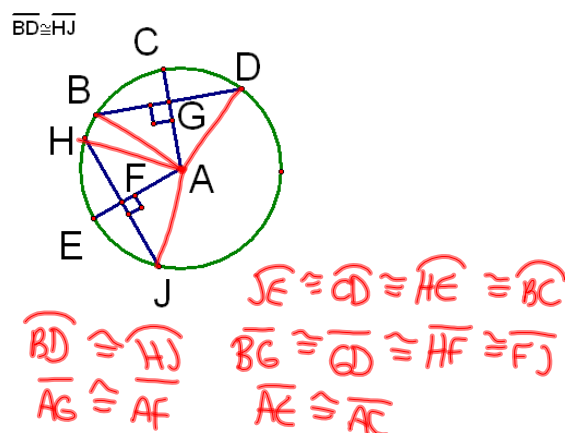
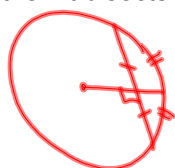
- the measure (degrees) of an arc
- the length (units) of an arc
- the circumference of a circle

$$C = 2\pi r$$

$$C = \pi d$$

Use right triangles to determine the length of a chord or radius

- congruent chords have congruent arcs
- congruent chords are equidistant from the center
- If the radius is perpendicular to a chord, then it bisects the chord and its arc.



- Do the following problems:
    - p.773 section 10-1 #s 1-5odd, 7-9
    - p.774 section 10-2 #s 1-12
    - p.774 section 10-3 #s 1-12
- Extend 10-3 #12: Suppose  $RF = 6$ , what is the radius?